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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,574	02/17/2004	Juha Hujanen	ASMMC.032DVI	3049

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EXAMINER

BERNATZ, KEVIN M

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 02/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/781,574

Applicant(s)

HUJANEN ET AL.

Examiner

Kevin M. Bernatz

Art Unit

1773

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 20 January 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.

b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
 - (b) ☐ They raise the issue of new matter (see NOTE below);
 - (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 - (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. ☐ Applicant's reply has overcome the following rejection(s): _____.

6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____.

Claim(s) objected to: _____.

Claim(s) rejected: _____.

Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).


10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.

12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____

13. ☐ Other: _____.



KMB
February 3, 2006

Continuation of 11. does NOT place the application in condition for allowance because: applicants' arguments were considered, but were found unpersuasive. Specifically, applicants argue that the 102 rejections are improper since there is a difference in the claimed structure versus the prior art structure conveyed by the process limitation "atomic layer deposition-formed" (page 2 of response). The Examiner respectfully disagrees.

The Examiner notes that while an ALD formed film might possess a high density, low pinhole density and/or low impurity concentration, these features are not claimed. The only structure claimed is a magnetic read head comprising a head gap fill layer selected from the group consisting of aluminum oxide, aluminum nitride, mixtures thereof and layered structures thereof. The Examiner notes that the issue seems to stem from the fact that the alleged differences between an ALD formed film and a sputtered film are, essentially, magnitude differences. I.e. what is a "high density" film or a "low pinhole density" film vis a vis a sputtered film? Given that the sputtered films are clearly capable of being used in exactly the identical location + function as the claimed ALD-deposited films, how do the sputtered films not also exhibit a "high density" and "low pinhole density"? Perhaps their density may not be as high as the ALD-deposited films, or they may not have a pinhole concentration as low as an ALD-deposited film, but the films do clearly possess substantially identical characteristics as the ALD-deposited materials. The Examiner's reasoning is that the sputtered deposited films are used for completely identical use as the ALD-deposited films. As such, while the Examiner does not dispute that the ALD-deposited films may possess some improved properties (read: higher density and lower pin hole density), there is no evidence that the sputtered films do not also possess a relatively high density and a relatively low pin hole density. Argumendo, they must since they would not be capable of being used as read gap films if they did not. Since applicants' present claims do not claim a specific magnitude of any of these properties, the Examiner maintains that a 102-type rejection is proper.

Applicants further re-iterate their position regarding the use of applicants' admissions regarding the thickness variation of the read gap layer (page 3 of response). The Examiner respectfully disagrees and notes that these arguments were addressed in Paragraph 10 of the Office Action mailed October 19, 2005. The Examiner notes that a range of 0 to <2% overlaps a teaching to "minimize" thickness variations, regardless of the final magnitude. I.e. 0 to 50% overlaps the claimed range just as 0 - 0.5% overlaps the claimed range. In both cases, the range is non-obvious over the prior art barring a showing that the prior art process is incapable of achieving the claimed property.

Finally, regarding applicants' argument that the "Examiner has provided no reference that teaches or suggests the desirability of using ALD in the context of head gap fill layers" (pages 3 - 4 of response), the Examiner agrees. The Examiner has no requirement to disclose such a reference since the present claims are directed to a product, not to a process. While applicants may very well be entitled to a patent on the process of using ALD for forming read gap films, the Examiner deems that applicants have not met their burden of showing why the claimed process results in a patentably distinct product.


Kevin M. Bernatz, PhD
Primary Examiner